

SECTION 02083

REMOVAL OF PCB AND PCB-CONTAMINATED
TRANSFORMERS AND OTHER PCB ITEMS
(REVISED 30 OCT 95)

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Prepare and turn in all PCB and PCB contaminated transformers and other PCB items to the Office of Environmental Management (EM), Bldg 479, Area B, Wright-Patterson Air Force Base. Ownership of PCB and PCB contaminated items and liquids shall remain with the Government.
- B. Contain and turn in to the EM all materials containing PCBs that result from performing the work except as indicated in paragraph 1.01.C.
- C. Materials containing PCBs that result from cleanup of spills caused by the contractor shall be the full responsibility of the contractor. These materials shall be contained and disposed of at the contractor's expense.

1.02 REFERENCES

- A. Environmental Protection Agency, EPA:
 - 1. Title 40 Code of Federal Regulations (CFR), Part 761, 261, 262, 263; all applicable Subparts, the most recent amendments.
- B. Occupational Safety and Health Administration, OSHA:
 - 1. Title 29 Code of Federal Regulations (CFR), Part 1910 and Part 1926; all applicable Subparts, the most recent amendments (especially 1910.120, 106, 133, 134, 144).
- C. Department of Transportation, DOT:
 - 1. Title 49 Code of Federal Regulations, Part 171, 172, 173, 177 and other applicable parts; the most recent amendments.

1.03 SPILLS

- A. Immediately report new or newly discovered existing PCB spills of any size to Environmental Management, 257-7455, Contract Management, 257-2047 and Civil Engineering Service Call, 257-6764.

- B. All materials and/or surfaces contaminated with PCB spilled during the work shall be the contractor's responsibility. The contractor shall do the cleanup, test for noncontamination, restore the area to as near original condition, and dispose of the contaminated materials per regulations and specifications; all at no cost to the Government.

1.04 SUBMITTALS

- A. Submit a Project Work Plan for approval in accordance with Section 01300. This plan shall include the following:
 - 1. Detailed procedures for the removal and handling of PCB and PCB contaminated items and liquids in compliance with all applicable regulations.
 - 2. A Health and Safety Plan satisfying the criteria of 29 CFR 1910.120.
 - 3. A Spill Prevention, Countermeasures and Control Plan including a Transportation and Containment Plan (40 CFR 264.50, 49 CFR, and 29 CFR 1910.120).
 - 4. A detailed project schedule indicating the sequence of operations to be performed.

1.05 COORDINATION

- A. The contractor shall notify the following in writing at least ten (10) working days prior to starting work at a site:
 - 1. 88 CEG/CECC Contract Management (Project Inspector).
 - 2. 88 ABW/EMC Environmental Management (Waste Management).
- B. All transformers included in the work have been or will be tested for PCB concentrations. Refer to drawings for test results. Prior to removal of any transformer or electrical item containing oil (switches, breakers, capacitors), contact EM, 257-7152, for PCB analytical results. Provide EM with manufacturer's serial number of each item being removed.
- C. The names of the personnel to be notified will be given to the contractor at the pre-construction meeting.

1.06 PROTECTIVE EQUIPMENT

- A. The contractor shall provide and maintain all personal protective equipment required by 29 CFR 1910 to perform PCB spill cleanup operations. This equipment is to be disposable to the extent allowable by regulations.
 - 1. Protective equipment shall include, but not be limited to; gloves, coveralls, boots, and cartridge respirators.

1.07 DEFINITIONS

- A. POLYCHLORINATED BIPHENYL (PCB): Any chemical substance that is limited to the biphenyl molecule that has been chlorinated to varying degrees or any combination of substances which contains such substance.
- B. PCB ITEM: Any item tested and found to contain 500 or more ppm PCB.
- C. PCB CONTAMINATED ITEM: Any item tested and found to contain between 50 and 499 ppm PCB.
- D. NON-PCB ITEM: Any item tested and found to contain 49 ppm PCB or less.
- E. PCB SPILL: The intentional and/or unintentional spills, leaks, and other uncontrolled discharges where the release results in any quantity of PCB, running off or about to run off the external surface of the equipment; and the contamination resulting from those releases.

PART 2 - PRODUCTS

Not Used.

PART 3 - EXECUTION

3.01 SECURITY OF SITES

- A. Install self-supporting barricades and post PCB spill warning signs at all entrances to work site.

3.02 SPILL CONTAINMENT

- A. Provide six mil plastic drop cloths or metallic drip pans where spillage may occur.
- B. Secure all floor drains, conduits and other openings.
- C. Use absorbent material to prevent contaminant migration under existing devices.

3.03 EQUIPMENT DECONTAMINATION

- A. Decontaminate all nondisposable items contaminated with PCB during the cleanup prior to exiting each site. Wipe all contaminated solid surfaces a minimum of three times with an organic solvent and swipe. Do not reuse the swipe. Do not reuse the contaminated solvent.
- B. Decontaminate all solid surfaces through a double wash/rinse. Cleanup of PCB will be done with a commercial/industrial liquid cleaner containing limonene as the organic solvent and an emulsifier. Apply with a portable sprayer, scrub the affected surfaces and rinse with clean water. Concurrently capture all free-flowing liquids using a wet vacuum.

3.04 PCB TRANSFORMERS, PCB CONTAMINATED TRANSFORMERS, AND EQUIPMENT

- A. Drain unless noted otherwise on the drawings. Perform all draining by pump or siphon. Use drums specified in "PREPARATION FOR TURN-IN" paragraph 3.07.
- B. Provide separate hoses and pumps for draining PCB and PCB contaminated oil. Decontaminate between each use per "EQUIPMENT DECONTAMINATION" paragraph 3.03.

3.05 CLEANUP OF SPILLS THAT OCCUR DURING WORK ON THE CONTRACT

- A. Ensure notification is made per the "SPILLS" paragraph 1.03. Implement the immediate action requirements contained in 40 CFR 761 and commence cleanup within 24 hours of the spill.
- B. Clean to residential/commercial standards in accordance with Subpart G of 40 CFR Part 761. Include all sampling required and formulate cleanup report.

3.06 TEMPORARY STORAGE

- A. Coordinate the temporary storage location for PCB and PCB contaminated items with EM and the Contracting Officer.
- B. Individually date all items to show when the item was removed from service or when the drum was filled and placed in temporary storage.
- C. Do not have any item in temporary storage for over 30 calendar days. Do not relocate items for the purpose of extending the storage time.
- D. Place drip pans or six-mil plastic sheeting to prevent possible seepage into the ground. Protect containers from rainwater.

3.07 PREPARATION FOR TURN-IN

- A. Prepare all PCB items for turn-in to EM, Bldg 479, Area B.
 - 1. Place all PCB and PCB-contaminated transformers, capacitors, and other equipment, if not too large, into DOT approved 17C 55 gallon open head steel drums. The drums shall be in good condition. If items are too large for drums, secure them onto pallets.
 - 2. Contain all liquids in 30 gallon or 55 gallon DOT approved 17E closed head steel shipping drums. Do not fill over 90% of drum capacity. The drums shall be in good condition.
 - 3. Contain all solid PCB material (used absorbent material, disposable clothing, removed soil, disposable tools, etc.) in 30 gallon or 55 gallon DOT approved 17C open head steel shipping drums. The drums shall be in good condition.
- B. Do not place non-PCB oils or items in containers with PCB oils or items. Do not place PCB oils or items in containers with PCB-contaminated oils or items.
- C. Identify each item individually with the following.
 - 1. The appropriate PCB label per Figure 1, 2 or 3.
 - 2. Date item was removed from service or the date the drum was filled.

- 3. Contents of the drum, i.e.: debris/ppe, oil, decon liquid.
 - D. Prepare an EPA Uniform Hazardous Waste Manifest and obtain EM signature per "DOCUMENTATION FOR TURN-IN" paragraph.
 - E. The Contractor shall be responsible for repackaging any containers that are considered by EM to be unsuitable for interstate shipment.
- 3.08 DOCUMENTATION FOR TURN-IN
- A. Contact EM at 257-7152 at least five (5) working days prior to turning in PCB waste. The name of the person to contact will be provided at the pre-performance meeting. Be prepared to provide the following information on each piece of equipment:

1. The estimated weight, contents, date removed from service or date drum was filled, and quantity of drums and items to be turned in.
- B. EM Certification. EM will conduct a site inspection required for certification of items to be turned in. EM will provide an AFLC Form 165, Hazardous Waste Label, to be applied to each item prior to turn-in.
- C. The contractor, shall coordinate a turn-in date and time with EM.
- D. Hazardous Waste Manifest. An EPA Uniform Hazardous Waste Manifest is required when transporting more than one (1) pound of PCBs on a public highway that is outside the Wright-Patterson reservation boundary. Coordinate a date and time with EM for obtaining an EM representative to sign the manifest prior to transporting.

3.09 TRANSPORT

- A. Provide pallets for all items that are to be forklifted and secure these items to pallet with metal banding.
- B. Utilize a trucking firm that has an USEPA identification number and is licensed in the State of Ohio for transporting hazardous material if the load contains over one pound of PCBs and the route taken includes a public highway that is outside the Wright-Patterson AFB reservation boundary.
- C. The contractor shall unload and move into storage all items in accordance with EM instructions. The contractor shall provide all equipment necessary (forklift, dolly, etc.)

3.10 LABELING

- A. Label (as shown in Figure 1, 2 or 3) all equipment, drums, etc. according to the PCB concentration of the oil, material contained or the oil removed from the item. Affix the label prior to working on or utilizing the item. The following formats shall be used for labeling:
 1. PCB and PCB-contaminated items or containers containing PCBs equal to or greater than 50 ppm.

(a) Large PCB Mark--ML. Mark ML shall be as shown in Figure 1, black letters and striping shall be on a yellow background and shall be sufficiently durable to equal or exceed the life of the PCB Article, Equipment, or Container. The size of the mark shall be at least 15.25 cm (6 inches) on each side. If the PCB Article or Equipment is too small to accommodate this size, the mark may be reduced in size proportionately down to a minimum of 5 cm (2 inches) on each side.

(b) Small PCB Mark--Ms. Mark Ms shall be as shown in Figure 2, black letters and striping on a yellow background and shall be sufficiently durable to equal or exceed the life of the PCB Article, Equipment, or Container. The mark shall be a rectangle 2.5 by 5 cm (1 inch by 2 inches). If the PCB Article or Equipment is too small to accommodate this size, the mark may be reduced in size proportionately down to a minimum of 1 by 2 cm (0.4 by 0.8 inches).

2. Non-PCB Items containing PCB in concentrations equal to or less than 49 ppm.

(a) Non-PCB Mark: This mark shall be as shown in Figure 3, white letters and striping on a blue background and shall be sufficiently durable to equal or exceed the life of the article, equipment, or container.

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/          CAUTION          /
/        contains          /
/          PCBs            /
/    (Polychlorinated Biphenyls)    /
/  A toxic environmental contaminant requiring  /
/ special handling and disposal in accordance with  /
/ U.S. Environmental Protection Agency Regulations  /
/ 40 CFR 761 - For Disposal Information contact  /
/   the nearest U.S. E.P.A. Office.    /
/ ***** /
/
/ In case of accident or spill, call toll free the U.S./
/   Coast Guard National Response Center    /
/     1-800-424-8802          /
/
/ Also Contact      /
/   Tel. No.        /
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Figure 1

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/  CAUTION contains PCBs    /
/ (Polychlorinated Biphenyls) /
/
/ FOR PROPER DISPOSAL INFORMATION /
/ CONTACT U.S. ENVIRONMENTAL    /
/ PROTECTION AGENCY            /
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Figure 2


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///////////////// C E R T I F I E D ///////////////////
/
/      /
/      THE DIELECTRIC FLUID IN THIS UNIT HAS      /
/      BEEN TESTED TO DETERMINE THE AMOUNT /
/      OF POLYCHLORINATED BIPHENYL(S) (PCB /
/      CONTENT). WE CERTIFY THAT BASED ON /
/      THE TEST SAMPLE, THE FLUID CONTAINED /
/      LESS THAN 50 PPM PCB AND IS THEREFORE /
/      CLASSIFIED A NON-PCB AS DEFINED /
/      THE AUG. 25, 1982, VOL. 47. NO. 165 /
/      OF THE FEDERAL REGISTER. /
/
///////////////// C E R T I F I E D ///////////////////

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Figure 3

END OF SECTION